

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
West Central Regional Office
STATEMENT OF LEGAL AND FACTUAL BASIS

Howard Miller Clock Company; Ridgeway Furniture
1131 Mica Road - Ridgeway, Virginia
Permit No. WCRO-30171

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Howard Miller Clock Company; Ridgeway Furniture has applied for a Title V Operating Permit renewal for its Ridgeway facility. The Department reviewed the application for renewal and prepared a draft/proposed Title V Operating Permit. The public notice and EPA review periods have expired and the final permit is dated December 16, 2005. This permit will expire December 15, 2010.

Engineer/Permit Contact:_____

FACILITY INFORMATION

Permittee

Howard Miller Clock Company
860 East Main Street,
Zeeland MI 49464

Facility

Ridgeway Furniture
1131 Mica Road
Ridgeway VA 24148

County-Plant Identification Number: 51-089-0066

SOURCE DESCRIPTION

NAICS Code: 337122 - Nonupholstered Wood Household Furniture Manufacturing

Howard Miller Clock Company, Ridgeway Furniture manufactures wooden curios. The original source registration was received on July 5, 1972 for Gravely Furniture Company, Inc. The plant changed ownership to Pulaski Furniture in 1985 and then changed again to Howard Miller Clock Company in 2004. The facility consists of two small woodwaste/#2 fuel oil boilers and various woodworking and finishing equipment as well as lumber drying kilns.

Production has decreased at the facility and they are now making curios instead of clocks. The lumber drying kilns are not being used at this time and may be removed in the near future. Woodworking operations have been streamlined since they receive cut stock instead of raw lumber. All woodworking operations are vented to one of eight fabric filters. Finishing operations in the spray booths has been decreased to incorporate fewer coats of stain and lacquer.

The original Title V Operating Permit was issued to this facility (Pulaski Furniture, Ridgeway Clocks Division) on December 11, 2000. This is the first Title V renewal.

The facility is a Title V major source of VOCs and HAPs. This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility was issued a minor NSR permit on December 23, 1998 to construct and operate an edge filler spray booth (ES-6).

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to

DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

The facility was last inspected on June 6, 2005 and was found to be in compliance.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Emission Unit Description	Capacity/ Size	Pollution Control Device (PCD)	PCD ID	Applicable Permit
Fuel Burning Equipment Subject to 9 VAC 5 Chapter 40 (Existing)					
ES-1	Union Iron Works boiler	7 MMBtu/hr	multicyclone	CD-8	N/A
ES-2	Union Iron Works boiler	7 MMBtu/hr	multicyclone	CD-9	N/A
Woodworking Equipment Subject to 9 VAC 5 Chapter 40 (Existing)					
ES-4	miscellaneous woodworking	varies	fabric filter (8)	CD 1-7a	N/A
Furniture Finishing Equipment Subject to 9 VAC 5 Chapter 40 (Existing)					
ES-3	spray booths (11)	varies	none	N/A	N/A
Furniture Finishing Equipment Subject to 9 VAC 5 Chapter 50 (New or Modified)					
ES-6	edge filler spray booth	1 gallon/hour	fiberglass filters	N/A	12/23/98

EMISSIONS INVENTORY

Emissions as provided in the annual emission inventory update for calendar year 2004 are summarized as follows:

2004 Pollutant Emissions in Tons per Year						
	CO	VOC	SO ₂	PM ₁₀	NO _x	HAPs
TOTAL	4.54	116.12	0.81	13.50	3.92	15.83

EMISSION UNIT APPLICABLE REQUIREMENTS

This facility is subject to the requirements of the Furniture Finishing MACT (Subpart JJ).

Limitations - Fuel Burning (ES-1, 2)

- Emissions from the operation of *each* of the boilers not to exceed 0.55 lb/MMBtu (PM) and 18.48 lb/hr (SO₂)
(9 VAC 5-40-900A.1.b and 9 VAC 5-40-930A.1)
- particulate emissions from each of the boilers shall be controlled by a multicyclone
(9 VAC 5-170-160)
- approved fuels for the boilers are woodwaste and No. 2 fuel oil
(9 VAC 5-80-110 B)
- visible emissions from each boiler shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity
(9 VAC 5-40-80)

Limitations - Woodworking Equipment (ES-4)

- PM emissions from the woodworking equipment shall not exceed 0.05 gr/scf exhaust gas
(9 VAC 5-40-2270.B)
- emissions from the woodworking equipment shall be controlled by eight fabric filters
(9 VAC 5-40-20)
- visible emissions from the fabric filters associated with woodworking equipment shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity
(9 VAC 5-40-80)

Limitations - Edge Filler Spray Booth (ES-6)

- Particulate emissions from the edge filler spray booth shall be controlled by fiberglass filters or equivalent - the edge filler spray booth shall be equipped with a device to continuously measure the differential pressure drop across the fiberglass filters
(9 VAC 5-80-110 C; Condition 3, Permit dated December 23, 1998)
- the edge filler spray booth shall consume no more than 1,960 gallons per year of lacquer

edge filler, calculated monthly as the sum of each consecutive 12-month period
(9 VAC 5-80-110 A; 9 VAC 5-80-110 B; Condition 5, Permit dated December 23, 1998)

- VOC emissions from the edge filler spray booth shall not exceed 5.2 lb/hr and 5.1 tons/yr
(9 VAC 5-80-110 B; Condition 6, Permit dated December 23, 1998)
- visible emissions from the edge filler spray booth exhaust shall not exceed five (5) percent opacity
(9 VAC 5-80-110 K; Condition 7, Permit dated December 23, 1998)

Limitations - Finishing (ES-3)

- visible emissions from each of the spray booths of the furniture finishing operations shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity
(9 VAC 5-40-80)

Maintenance/Operating Procedures - Facility Wide

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, from equipment covered in the Title V permit through implementation of an operations and maintenance schedule as follows:

- Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for manufacturing equipment and air pollution control equipment
- Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the manufacturing equipment and air pollution control equipment and maintain records of inspection results.
- Have available written operating procedures for the manufacturing equipment and air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at minimum, if such recommendations exist.
- Train operators in the proper operation of the manufacturing equipment and air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

(9 VAC 5-80-110 K, 9 VAC 5-80-110 F; 9 VAC 5-170-160)

Monitoring and Recordkeeping - Facility Wide

Compliance Assurance Monitoring (CAM) is not required at this facility for the following reasons:

- finishing operations are covered under the Wood Furniture Finishing MACT (JJ) - CAM is not required for processes already covered by a MACT;
- boilers at the facility are covered under the Industrial Boiler MACT (DDDDD) and they have <100 tons per year potential to emit to the multicyclone- CAM is not required for processes already covered by a MACT; and
- PM emissions from woodworking equipment to the fabric filters does not exceed 100 tons per year for each system (baghouse), therefore CAM is not required for the fabric filters.

Periodic Monitoring requirements for visual emission observations on the boilers, fabric filters and spray booth exhausts are being changed from *weekly* to *monthly*. This facility has conducted the required weekly observations for the duration of this first five-year Title 5 permit cycle with no violations. Weekly records have been maintained in proper order. This decision to reduce periodic monitoring requirements is being made with the approval of the regional air compliance staff.

Monitoring and Recordkeeping - Fuel Burning (ES-1, 2)

- the permittee shall perform monthly visual observation for visible emissions from each operating boiler - if visible emissions are observed the permittee shall:
 - take timely corrective action such that the boiler resumes operation with no visible emissions, or,
 - perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the boilers are 20 percent opacity or less. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed twenty percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the boiler resumes operation with visible emissions of 20 percent or less(9 VAC 5-80-110 E)
- the permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. These records shall include, but are not limited to the following:
 - a boiler observation log for the boilers to include the date and time of visual

observations, the name of the observer, whether or not there were visible emissions, any VEE recordings and any necessary corrective action,

- the annual combustion of each fuel in the boilers calculated monthly as the sum of each consecutive 12-month period, and
- verification that the sulfur content for each shipment of No. 2 fuel oil to be burned in the boilers meets ASTM specifications

(9 VAC 5-40-1010)

Monitoring and Recordkeeping - Woodworking Equipment (ES-4)

- the permittee shall perform monthly visual observation for visible emissions from each fabric filter - if visible emissions are observed the permittee shall:
 - take timely corrective action such that the fabric filter resumes operation with no visible emissions, or,
 - perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filters are 20 percent opacity or less. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed twenty percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with visible emissions of 20 percent or less

(9 VAC 5-80-110 E)

- the permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit including but not limited to the results of the monthly visible observation of emission points associated with the woodworking operations along with any corrective actions

(9 VAC 5-50-50)

Monitoring and Recordkeeping - Edge Filler Spray Booth (ES-6)

- the permittee shall perform monthly visual observation for visible emissions from the spray booth - if visible emissions are observed the permittee shall:
 - take timely corrective action such that the spray booth resumes operation with no visible emissions, or,
 - perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the spray booth are 5 percent opacity or less. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed twenty percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the spray booth resumes

operation with visible emissions of 5 percent or less
(9 VAC 5-80-110 E)

- the permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit including but not limited to:
 - annual throughput of lacquer edge filler calculated monthly as the sum of each consecutive 12-month period
 - monthly and annual material balance including the throughput and emissions of VOCs calculated monthly as the sum of each consecutive 12-month period
 - results of the monthly visible observation of the edge filler spray booth along with any corrective actions
- (9 VAC 5-170-160; 9 VAC 5-50-50; Conditions 5 & 10, Permit dated December 23, 1998)

Monitoring and Recordkeeping - Finishing (ES-3)

- the permittee shall perform monthly visual observation for visible emissions from the spray booths - if visible emissions are observed the permittee shall:
 - take timely corrective action such that the spray booth resumes operation with no visible emissions, or,
 - perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the spray booths are 20 percent opacity or less. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed twenty percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the spray booths resume operation with visible emissions of 20 percent or less
- (9 VAC 5-80-110 E)
- the permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit including but not limited to results of the monthly visible observation of the spray booth stacks along with any corrective actions
- (9 VAC 5-50-50)

Reporting - Facility Wide

The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year - this report to include:

- time period included in the report
- deviations from permit requirements - deviations include, but are not limited to:

- exceedance of emissions limitations or operational restrictions;
- excursions from control device operating parameter requirements, or,
- failure to meet monitoring, recordkeeping, or reporting requirements.

(9 VAC 5-80-110 F)

The permittee shall submit an annual compliance certification to EPA and DEQ no later than March 1 to include:

- time period included in the certification
- identification of each term or condition of the permit that is the basis of the certification
- compliance status
- whether compliance was continuous or intermittent
- the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- any other facts as the permit may require to determine the compliance status of the source.

(9 VAC 5-80-110 K.5)

The permittee shall notify the regional office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the regional office.

(9 VAC 5-20-180 C)

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement No. 3-2001”.

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources

9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

STATE ONLY APPLICABLE REQUIREMENTS

This permit contains no State Only Applicable Requirements

FUTURE APPLICABLE REQUIREMENTS

All aspects of this facility are covered by a MACT requirement (Furniture Finishing, Industrial Boiler) that have already been promulgated or are not subject to a MACT (woodworking). This facility should not be covered by any known future applicable requirements.

INAPPLICABLE REQUIREMENTS

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

COMPLIANCE PLAN

This facility is not subject to a compliance plan.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
ES-5	Lumber Dry Kilns	VOC	110,000 bd ft/wk
ES-7	enclosed woodwaste loadout	PM	varies
ES-8	#2 fuel oil UST	VOC	20,000 gallons
ES-10	gluing operations	VOC	varies

All activities listed are insignificant due to emission levels as specified in 9 VAC 5-80-720 B.

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The draft/proposed permit was advertised for public notice in "The Martinsville Bulletin" on October 26, 2005. The required 30-day public notice period closed on November 25, 2005. No comments were received.

The 45-day EPA review period ended on December 10, 2005. No comments were received.

This permit was advertised for *concurrent review*.